### NATIONAL REGISTER OF HISTORI REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

RECEIVED

l. Name of Property		
istoric name Curtiss-Wright Hangar		
other names/site number Owens Field Mu	unicipal Airport Hangar	<del></del>
2. Location		
treet & number 1400 Jim Hamilton Boul	levard	not for publication
state South Carolina code SC	county Richland code	vicinity
3. State/Federal Agency Certifica	tion	
As the designated authority under the National H this X nomination request for determinat properties in the National Register of Historic in 36 CFR Part 60. In my opinion, the property recommend that this property be considered signi ( See continuation sheet for additional comme  Mary W. Edmonds, Deputy SHPO, S.C. Department of State or Federal agency and bureau  In my opinion, the property meets does ( See continuation sheet for additional comme	cion of eligibility meets the documentation Places and meets the procedural and profes X meets does not meet the National ficant nationally x statewide lost nots.)	standards for registering sional requirements set forth Register Criteria. I
Signature of commenting or other official	Date	
State or Federal agency and bureau		
4. National Park Service Certific	cation	
I, hereby certify that this property is:	Signature of Keeper Date	4.30.96

### 5. Classification

publi publi	es as apply) ( ate Lc-local Lc-State Lc-Federal ced multiple p	Category of Prop Check only one box)  x building district site structur object  coperty listing a multiple property	g(s) :- ce Nur	Number of Resorting  1  1  1  1  nber of contributing  1  nber of contributing	Noncontribu  1 1 1 outing resour	ting buildings sites structures objects Total ces previously
6. Function	n or Use					
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Cat:	t <b>ions</b> (Enter categon Vacant/Not I	ories from instruction USE	Sub:			
7. Descrip	tion					
(Enter categories other: Airplands)  Narrative De	scription	on	foundation roof walls other	Concrete Metal Brick Steel Glass Continuation sheets.		
·	nt of Signif		y on one of more		,	
Applicable N	ational Regist or more boxes for the Property is contribution Property is Property emb or method of possesses hi distinguisha	er Criteria e criteria qualifying associated with to the broad p associated with odies the disti construction o gh artistic val ble entity whos yielded, or is	events that atterns of o the lives o nctive charar represents ues, or represents e components	have made a sur history. f persons sign cteristics of the work of a esents a signilack individu	ignificant ificant in or a type, perior master, or ficant and al distinction	od,

Criteria Considerations Mark "X" in all the boxes that apply.)					
A owned by a religious institution or us removed from its original location.  C a birthplace or a grave.  D a cemetery.  E a reconstructed building, object,or st a commemorative property.  G less than 50 years of age or achieved	ed for religious purposes.  ructure.  significance within the past 50 years.				
Areas of Significance	Significant Dates				
(Enter categories from instructions)	1929				
Transportation Architecture					
	Significant Person (Complete if Criterion B is marked above)				
	(complete if circuiton B is marked above)				
	Cultural Affiliation				
Period of Significance 1929-ca.1945					
	Architect/Builder Curtiss Flying Services				
Narrative Statement of Significance					
(Explain the significance of the property on one or more continuation sheets	s.)				
9. Major Bibliographical References					
Bibliography (Cite the books, articles, and other sources used in preparing this form on Previous documentation on file (NPS)  preliminary determination of individual listing (requested.  previously listed in the National Register  previously determined eligible by the National Redesignated a National Historic Landmark  recorded by Historic American Buildings Survey  recorded by Historic American Engineering Record  Primary Location of Additional Data  State Historic Preservation Office  Other State agency  Federal agency  Local government	(36 CFR 67) has been egister				
x University					
Other Name of repository: University of South Carolina					
10. Geographical Data					
Acreage of Property approx. 1.5					
UTM References (Place additional UTM references on a continuation sheet)					
Zone Easting Northing Zone Easting	Northing				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
See continuation sheet.					
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)					

**Boundary Justification** (Explain why the boundaries were selected on a continuation sheet.)

ii. roim riebaied p	1	1.	Form	Prepared	By
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name/title Deborah C. King, Graduate Student (w/assistand	ce from Andrew W. Chandler, SCDAH)		
organization University of South Carolina	date November 4, 1997		
street & number 137 S. Pickens Street	telephone <u>803-254-2835</u>		
city or town Columbia s	state SC zip code 29205		
Additional Documentation			
Submit the following items with the completed form:			
Continuation Sheets			
Maps A USGS map (7.5 or 15 minute series) indicating the p A Sketch map for historic districts and properties had resources.	<b>.</b> • •		
Photographs Representative black and white photographs of the pro	operty.		
Additional items (Check with the SHPO or FPO for any additional items)			
Property Owner			
(Complete this item at the request of the SHPO or FPO.)			
name Richland County Airport Commission			
street & number Columbia Owens Downtown Airport, PO Box 19	92 telephone 803-748-4616		

city or town Columbia state SC zip code 29202

NPS Form 10-900-a (8 86)

OMB No. 1024-0018

United States Department of the Interior National Park Service

### NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section  $_{-7}$  Page  $_{1}$ 

Curtiss-Wright Hangar
name of property
Richland County, South Carolina
county and State

#### Narrative Description

The Curtiss-Wright Hangar at Columbia Owens Downtown Airport (formerly known as Owens Field Municipal Airport), constructed in 1929, is a running bond gray brick structure with a metal-clad barrel roof. The hangar's architecture is similar to that of hangars at other airports during the 1920s; the Cleveland Municipal Airport (1925) has hangars that strongly resemble the Curtiss-Wright Hangar. The hangar has a main open storage area for airplanes, which is flanked on either side by flat-roofed wings. The central storage area of the hangar is about two stories in height, and has a clearance of approximately twenty feet beneath the steel roof Located at the corner of Jim Hamilton Boulevard and Airport Drive, in the middle of a residential and industrial area, the hangar is situated near the runway of the airport. The hangar was used as a traditional hangar, office space, and a maintenance area until 1986 when new hangars and a new runway were constructed. The hangar now has rusted doors, many broken window panes, and a leaky roof. While the hangar has physically deteriorated over time, it has retained its integrity in terms of location and design.

The front (southwest facade) and the northeast elevation of the hangar along Jim Harrison Boulevard are both dominated by sliding steel doors on the main part of the building. The top half of each of the doors is made up of eight sections of double steel framed windows, divided into twelve-over-twelve pane sections. The two windows on the front side of the wings are metal-framed twenty-pane panels, the center six-paned section on only the southeastern wing serviing as inward-leaning hopper windows. The northwestern wing has less complex windows on its facade with simple steel-framed, twenty-pane window panels.

Other distinct features on this and the opposite facade are brick piers at each corner of the main hangar building and at the outer corners of each wing. Atop each pier is either a large concrete ball finialor the remnant of one. These piers, while serving as decorative elements, also help support and carry the steel track for the sliding hangar doors. There are four light fixtures on the front facade: two are located on the cememnt wall underneath the roof, and two are located on the top of the piers at the corners of the main part of the building.

Herbert Gottfried and Jan Jennings, American Vernacular Design (Ames, IA: Iowa State University Press, 1988), 22-23; Nikolaus Pevsner, et al., A Dictionary of Architecture (Woodstock, NY: The Overlook Press, 1976), 428.

<sup>&</sup>lt;sup>2</sup>Jos. H. Wenneman, <u>Municipal Airports</u> (Cleveland: The Flying Review Publishing Company, 1931), 22, 776-777.

<sup>3</sup>Ibid.

<sup>&</sup>lt;sup>4</sup>Gottfried, American Vernacular Design, 80-81.

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On the semi-circular stuccoed wall surface of the hangar's front (southwestern facade) gable can be seen the sign "Curtiss-Wright Flying Service" bleeding through the white paint. During the 1940s "Municipal Airport/Owens Field" was panted on the wall. Later in the 1940s and 1950s, "S.C. Aeronautics Commission" was painted on the wall when the Commission made its headquarters in the hangar.

The southeastern side of the building, or wing, faces the rest of the airport property. The windows in this wing are of varied shapes. There are some windows without hoppers that do not open; these windows are either 4x2 panes or 5x4 panes. The windows that open are either 3x4 panes, with a 3x3 pane hopper window, or 5x4 panes, with a 3x2 pane hopper window.

This wing features four pilaster buttresses along the southeast facade. At center, there is a brick and masonry staircase leading up to the roof of the wing. The double-flight staircase converges into a single flight at a perpendicular angle and continues to the roof. The staircase is strengthened by a round or relieving arch, beneath which is a doorway which eads to a full-sized basement that is no longer accessible.

The roof of this wing is covered with asphalt, and there are clerestory windows in the main hangar section above the wing's roof. These windows were constructed to allow more light and air into the main hangar section. All of the clerestory windows are steel-framed and are 5x3 panes in configuration; some have hoppers in their center which are 3x2 panes in shape. There is also a brick chimney flue with corbeled cap about midway between the staircase entrance to the roof and the north end of the wing.

The stuccoed wall of the gable on the rear (northeast elevation) of the building has also had lettering on it in the past. Through the top coat of white paint can be seen "Curtiss-Wright Flying Service" on this wall.

The northwest wing is similar in shape to the southeastern wing, but it is not as tall and there is no staircase to the roof. The windows are simpler, having no hopper windows. All that are visible are 5x4 panes in configuration.

There is a small square brick outbuilding near this side of the building. Although its function is not specifically related to that of the hangar, it was probably built around the same time as the hangar (1929-

Joseph Swearingen, <u>Aviation</u>, <u>Flying Machines and Organizations in the Carolinas and Virginia</u>, <u>A Pictorial History</u>, <u>1903-1985</u> (Columbia, SC: Dependable Printing Company, Inc., 1985), 138, 170.

<sup>&</sup>lt;sup>6</sup>Gottfried, American Vernacular Architecture, 86, 104.

NPS Form 10-900-a (8-86)

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1930) since it was the site of the first runway light controls. It has small slots in the brick that serve as windows; however, because of lack of use the building's roof has collapsed. $^7$ 

The interior of the hangar is divided much as the exterior is. The main hangar space has no divisions and a cement floor. The southeastern wing is divided into three rooms, two of which are empty. The northernmost room served as a latrine, as it contains three toilets and a lavatory. The northwestern wing has no divisions.

<sup>&</sup>lt;sup>7</sup>Jim Hamilton, interview by author, 31 March 1997.

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Curtiss-Wright Hangar
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#### Narrative Statement of Significance

The Curtiss-Wright Hangar, the first building erected at Owens Field in 1929, represents the contributions of air transportation to the city of Columbia and the state of South Carolina. The hangar grew and changed along with the airport and aviation history. It was first used to house airplanes for passenger and airmal services, then became the headquarters of the South Carolina Aeronautics Commission, later was used as space for the civilian flight training program, and finally was used for general aircraft maintenance. The hangar meets National Register Criterion A in the area of Transportation for the years 1929-1945.

Aviation in the United States after World War I was limited to shaky airmal attempts and aviators who came home from the war with no other skills other than their flying ability. These "barnstormers" flew around their regions and the country, landing in farmers' open fields. The barnstormers often put on flying "circuses" or shows and charged a fee to take passengers up in the air for a ride. According to Cecil Roseberry, author of The Challenging Skies, although the barnstormers were nomadic and not always a safe ride, they helped provide a transition from "combat availation to passenger transport...The wandering freelance fliers played a valuable role in this transition furthering what was commonly referred to as air mindedness, and preparing the public to accept air travel when it became a reality." Thus airports began to spring up around the country and federal government began regulating flight. South Carolina had its share of barnstormers who landed in fields around the state until the construction of airports like Owens Field.

The airport, built in April 1929 on a site three miles south of the ciy, was named for Columbia Mayor Lawrence B. Owens, who was one of the most ardent supporters of a municipal airport. The Richland County chain gang performed some of the work and during the summer Curtiss Flying Service built the hangar and runways. Curtiss also planned to maintain the airport. On April 24, 1930, the new municipal airport was dedicated as Owens Field. In celebration, an airshow was held. This airshow drew over 150 aviators from the state and throughout the Southeast, as well as over 15,000 spectators. Airshows were very popular during the 1930s because

<sup>&</sup>lt;sup>8</sup>Cecil R. Rosebery, The Challenging Skies (New York: Arno Press, 1980), 39.

<sup>&</sup>lt;sup>9</sup>John Hammond Moore, <u>Columbia and Richland County: A South Carolina Community</u>, 1740-1990 (Columbia, SC: University of South Carolina Press, 1992), 337.

<sup>10&</sup>quot;Pilots and Planes Attract Thousands to Owens Field," The State (Columbia, SC), April 25, 1930.

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of the promise of excitement, money and fame that the shows could bring pilots and spectators during the Depression. Casey Jones, the president of Curtiss Flying Service, was one of the aviators featured, along with Bill Winston (Charles Lindbergh's flying instructor) and Elliott White Springs. Springs, a South Carolina native, flew with the Royal Flying Corps during World War I and shot down an estimated eleven German planes, making him the "fifth-ranking American air ace."

During the 1930s other famous figures flew into Owens Field. Amelia Earhart, perhaps America's best-known female pilot, flew into Owens Field on November 16, 1931. President Franklin Delano Roosevelt also flew into Owens Field on December 5, 1938. Waiting to greet him were Governor Olin D. Johnston and Mayor Owens, who tried to impress the President with the growth of aviation in Columbia in the hopes of receiving federal funds. During the New Deal administration, WPA aviation projects which either built or expanded airports were some of the administration's least controversial projects. Description of the second controversial projects.

Although Owens Field had the distinction of hosting many well-known aviators and personalities, its most important contribution was air service to the general public and the military. Eastern Air Transport began passenger and airmail service in 1932. The services were the first regularly scheduled flights between Charlotte, North Carolina, Camden and Columbia in South Carolina, and Augusta, Georgia. Delta Airlines began its first scheduled services out of Columbia's new airport in 1934. Owens Field thus opened a new transportation opportunity to Columbia and South Carolina which was also fast becoming a part of the local company.

In 1935, signaling the growing importance of aviation in the state of South Carolina, the State Legislature created the South Carolina

<sup>&</sup>lt;sup>11</sup>John W. R. Taylor and Kenneth Munson, <u>History of Aviation</u> (London: New English Library, 1972.

<sup>&</sup>lt;sup>12</sup>Louise Pettus, The White Homestead: The Story of a House, the People who lived in it, and the Land around it (n.p., n.d.), 47.

<sup>&</sup>lt;sup>13</sup>Owens Field Pilot Register, 1931.

<sup>&</sup>lt;sup>14</sup>Russell Maxey, <u>Airports of Columbia: A History in Photographs and Headlines</u> (Columbia, SC: Palmetto Publishing Company, 1987), 59.

<sup>&</sup>lt;sup>15</sup>Roseberry, <u>THe Challenging Skies</u>, 231.

<sup>16</sup>Maxey, Airports of Columbia, 51.

<sup>&</sup>lt;sup>17</sup>Ibid., 58.

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Aeronautics Commission, which had its headquarters in the Curtiss-Wright Hangar until a new terminal at Owens Field was built in 1937. The first director of the SC Aeronautics Commission, Dexter Martin, wa also the first licensed pilot in the state and was a leader in beginning civilan flight training in 1939. The training was conducted at Owens Field by Hawthorne Flying Service. 18

The flight training continued during World War II under the Hawthorne School of Aeronautics, the Palmetto School of Aeronatuics, and the University of South Carolina. Bevo Howard, director of Hawthorne, contracted the school's services with the military in 1941. While most major military operations moved to an Army air base in Lexington County (now Columbia's Metropolitan Airport), U.S. and French pilots trained in the air, in the University of South Carolina's classrooms and in thehangars of Owens Field, where maintenance and repairs were performed. Both men and women trained at Owens Field. Caroline Hembel, the first woman in the region to receive her pilot's licens in the Civilian Pilot Training Program, was an instructor at the school.<sup>19</sup>

After World War II, Owens Field transferred all commercial services to Columbia's new and larger municipal airport due to an increase in activity which it was not equipped to handle. Ownership of the airport was transferred from the city to Richland County, its current owner, in 1962, and since then has been operated by the county's Airport Commission. Owens Field served military and civil patrol flights until 1970, and the Curtiss-Wright Hangar was used until 1986 for maintnenance on aircraft.

As the oldest and last standing remnant of Owens Field, the Curtiss-Wright Hangar symbolizes the development of aviation in South Carolina and the city of Columbia. Aviation in Columbia has made many contributions to the community and has become a part of everyday life of city residents. The different uses of the hangar over time reflect the changing uses of Owens Field and show how historic themes such as transportation affected the everyday life of aviators and citizens alike. Ownes Field and the Curtiss-Wright Hangar were part of a new era in transportation.

<sup>18</sup>Bunny S. Richardson, "Orville Wright Signed Dexter Martin's Flying Licenses During Flight's Formative Years," The Columbia Record (Columbia, SC), December 18, 1978.

<sup>19</sup>Wally Hitchcock, "World War II Fliers Gather for Reunion in Orangeburg," The State (Columbia, SC), April 18, 1982; Joseph Swearingen, Aviation Museums: Aviators, Flying Machines, and Organizations in teh Carolinas and Virginia. A Pictorial History, 1903-1985 (Columbia, SC: Dependable Printing Company, IDC., 1985), 138-139, 141.

### NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

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#### Bibliography

- Gottfried, Herbert and Jan Jennings. American Vernacular Design. Ames, IA: Iowa State University Press, 1988.
- Hamilton, Jim. Interview by author. 31 March 1997.
- Maxey, Russell. <u>Airports of Columbia: A History in Photographs and Healines</u>. Columbia, SC: Palmetto Publishing Company, 1987.
- Moore, John Hammond. Columbia and Richland County: A South Carolina Community, 1740-1990. Columbia, SC: University of South Carolina Press, 1993.
- Owens Field Pilot Register, 1931.
- Pettus, Louise. The White Homestead: The Story of a House, the People Who Lived in it, and the Land around it. n.p, n.d.
- Pevsner, Nikolaus et al. <u>A Dictionary of Architecture</u>. Woodstock, NY: The Overlook Press, 1976.
- "Pilots and Planes Attract Thousands to Owens Field." The State (Columbia, SC), April 25, 1930.
- Roseberry, Cecil R. The Challenging Skies. New York: Arno Press, 1980.
- Swearingen, Joseph. <u>Aviation Musueums: Aviators, Flying Machines and Organizations in the Carolinas and Virginia. A Pictorial History, 1903-1985</u>. Columbia, SC: Dependable Printing Company, Inc, 1985.
- Taylor, John W. R. and Kenneth Munson. <u>History of Aviation</u>. London: New English Library, 1972.
- Wilbur Smith and Associates. <u>Airport Plan: Fairfield, Lexington, Newberry and Richland Counties, South Carolina</u>. n.p., September 1971.

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### Verbal Boundary Description

The Curtiss-Wright Hangar is located at the southern corner of Airport Drive and Jim Hamilton Boulevard, and is delineated by the black line on the accompanying Richland County Tax Map No. 11215, drawn at a scale of 1"=100'. It is a portion of that part of Richland County Tax Map No. 13702, Section 09, Parcel 01 which overlaps onto Map No. 11215.

#### **Boundary Justification**

The boundary is the extreme northern corner of Columbia Owens Downtown Airport which maintains its historic integrity. It includes the historic hangar, a noncontributing out building, and a portion of the tarmac in front of or to the southeast of the hangar. The remainder of the airport's boundaries are complex and has changed over time.

## NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section PHOTOGRAPHS Page 8 Curtiss-Wright Hangar name of property

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#### Current Photographs

Information for photographs 1-4 is as follows:

Property: Curtiss-Wright Hangar, Columbia Owens Downtown Airport

County and State: Richland County, South Carolina

Photographer: Deborah C. King

Date taken: 31 March 1997

Location of negatives: Deborah C. King

- 1) Southwest or front facade
- 2) Southwest or front facade
- 3) Southeast lean-to
- 4) Southeast staircase

#### Historic Photographs

Information for photographs 5-10 is as follows:

Property: Curtiss-Wright Hangar, Columbia Owens Downtown Airport

County and State: Richland County, South Carolina

Photographer: Photographs may be found in Russell Maxey, Airports of

Columbia: A History of Photographs and Headlines (Columbia, SC: Palmetto Publishing Company, 1987.

- 5) "Owens Field Municipal Airport, looking SE, April 25, 1930." Maxey, 57.
- 6) "Owens Field Municipal Airport, looking NW, April 25, 1930." Maxey, 57.
- 7) "Owens Field, circa 1940." Maxey, 68.
- 8) "Parking Apron at Owens Field, circa 1940." Maxey, 67.
- 9) "105th Observation Squadron, Owens Field, circa 1947." Maxey, 65.
- 10) "U.S. Navy V-5 cadets from USC train at Owens Field (1948 photo by Dexter Martin)." Maxey, 65.
- 11) Owens Field, 1987 (Photo by Coats Crewe)." Maxey, 90.

Information for photograph 12 is as follows:

Property: Cleveland Municipal Airport

County and State: Cuyahoga County, Ohio

Photographer: Unknown; photograph in Jos. H. Wenneman, Municipal Airports,

(Cleveland: The Flying Review Publishing Company, 1931).

Date: circa 1925

Caption: "The Cleveland Municipal Airport."